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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/989,437	11/21/2001	Mamiko Sugimoto	DP-820 US	1606
21254 7590 10/05/2007 MCGINN INTELLECTUAL PROPERTY LAW GROUP, PLLC 8321 OLD COURTHOUSE ROAD SUITE 200 VIENNA, VA 22182-3817			EXAMINER HOLTON, STEVEN E	
			ART UNIT 2629	PAPER NUMBER
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

09/989,437

Applicant(s)

SUGIMOTO ET AL.

Examiner

Steven E. Holton

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 24 July 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-36 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. This Office Action is made in response to applicant's amendment and request for continued examination filed on 7/24/07. Claims 1-36 are currently pending in the application. An action follows below:

#### ***Response to Arguments***

2. Applicant's arguments, see pages 15-17, filed 6/25/2007, with respect to the rejection(s) of claim(s) 1-30 under 35 USC 102 and 103 have been fully considered and are persuasive in light of the amendments to the claims. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of newly found prior art.

The Examiner agrees that Montlick and other references do not expressly disclose the 'intra-identifier' code concept as amended into the claims. The Frasca Jr. (USPN: 6055506) reference is used to show that an intra-identifier code used to provide further storage information for a data record within a storage system is a technique shown in the prior art for storage and identification of data records within a database storage system.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 2, 3, 7, 9, 10, 12, 13, 15, 16, 24, and 31-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Montlick (USPN: 5561446) in view of Frasca, Jr. (USPN: 6055506).

Regarding claim 1, Montlick discloses a wireless apparatus and pen based input data entry system. The system comprising: an input/display device (Fig. 1, element 12) including input means and display means and receiving hand writing inputs (see Fig. 3), a storage (Fig. 1, elements 19 and 20) for storing substantially all medical data (col. 4, line 66- col. 5 line 2). Montlick further discloses sheet labels (Fig. 2, element 32; each tab can be considered a sheet label associated with a specific page/sheet of information) where as the input means moves onto different sheet labels the information associated with said sheet label is displayed on the screen (col. 5, line 54 – col. 6, line 3). The Examiner notes that Montlick recites that touching the pen to any of the menu fields will select the menu field. Sliding the pen along the screen so that it touches one or another menu field would also select the menu field and display the information associated with the menu field. Montlick changing the display so that proper information is displayed constitutes a change-over operation.

However, Montlick does not expressly disclose “determining whether an identifier has been received in said handwriting” and “wherein said identifier comprises a data identifier that identifies stored data corresponding to an intra-identifier code.”

Frasca, Jr. discloses an outpatient data system for providing medical care from multiple physical locations connected to a computer system across a network. Frasca Jr. discloses storing data records based on input from a location that include storage of the person entering the data, the location the data was entered from and other timing information about the overall data file (Fig. 9, elements 208, 236, and others; col. 8, line 62 – col. 9, line 53). The data fields such as location the record was entered and the person who created the data record are intra-identifier codes, in that these data fields provide searchable identifier codes that link different data records based on attributes of the information with the data record. Frasca Jr. states that the information in the record can be input by a user or automatically by a computer system (col. 10, lines 14-21). Thus, it would be obvious that data could be entered through a handwritten data entry system, a keyboard entry system, or any other type of data entry system for a computer.

At the time of invention it would have been obvious to combine the teachings of Montlick with Frasca Jr. to produce a medical record storage system that provides intra-identifier codes to stored data records that provide further information about a data record. The data records could be input through the handwriting input system of Montlick rather than using the phone based or automatic entry system of Frasca Jr. The rationale for including such intra-identifier codes would be to increase the ability to search and retrieve related files from a large database of medical records and security

to keep invalid or false data records from being created within the system. Thus, it would have been obvious to one skilled in the art to combine the teachings of Montlick and Frasca Jr. to produce a medical record storage device that allows for entry of intra-identifier codes along with medical records for proper storage and identification of a medical record as described in claim 1.

Regarding claim 9, the Examiner notes that the claim states, "wherein the method comprises one of" and then provides a list of operations that are part of the method. The first operation described is the same as the operation described in claim 1. Therefore, the arguments applied to claim 1 can be applied to claim 9.

Regarding claims 2 and 10, Montlick teaches, a medical treatment system where when the segments (Fig. 3, segments labeled 'Vital Signs', 'Eyes', 'Ears' and 'Other') of an input field are displayed (Fig. 3, element, element 50), the segments have labels assigned in a previously specified sequence. The Examiner notes that many of the input fields are pre-made forms from the central controller, thus the segment labels are assigned based on predetermined sequences.

Regarding claim 3, Montlick discloses, "wherein in the storage the data are substantially all stored after... an operation to explicitly close a medical report (col. 8, lines 1-9)."

Regarding claim 7, Montlick teaches, a medical treatment system where when the segments (Fig. 3, segments labeled 'Vital Signs', 'Eyes', 'Ears' and 'Other') of an input field are displayed (Fig. 3, element, element 50), the segments have labels assigned in a previously specified sequence. The Examiner notes that many of the

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input fields are pre-made forms from the central controller, thus the segment labels are assigned based on predetermined sequences.

Regarding claims 12, 13, and 15, the Examiner takes Official Notice that at the time of invention it was well known in the art to make data files stored on a network to be unalterable except by users with certain permissions. When a user accessed a file that has been made unalterable, a display item, icon, or message is displayed to the user that the data cannot be changed. Therefore, it would have been obvious to one skilled in the art to allow that medical records not be altered because of the need of accurate medical history for patients, and would display information so that a user would recognize when a medical record could not be altered.

Regarding claims 16 and 24, Montlick teaches, "wherein said input/display device is a pen-tablet device (Fig. 1, element 12)."

Regarding claims 31 and 33, Frasca Jr. discloses providing identifier codes that identify the input operator of a data record (Fig. 9, element 236; col. 9, lines 44-53).

Regarding claims 32 and 34, Frasca Jr. discloses providing identifier codes that identify the location that data was input from (Fig. 9, element 208; col. 9, lines 9-22).

The Examiner notes that the Site could be modified to include the device the actual physical device used to enter the data element rather than a physical outpatient location used to enter the data from.

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4. Claims 4, 5, 6, 8, 11, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Montlick in view of Frasca Jr. as applied to claims 1 and 9 above in view of Snell et al. (USPN: 5724985), hereinafter Snell.

Regarding claims 4, 5, 6, 8, and 11, as discussed above, the combination of Montlick and Frasca Jr. discloses all of the limitations except, "wherein said input/display device conducts character recognition processing for handwritten data inputted from said input means, the handwritten data being an array of values of coordinates; converts by said character recognition processing the data into text data including an array of character codes, and displays the text data." Montlick does disclose saving handwriting data as 'x and y screen pixel coordinates (col. 4, line 24)'.

Snell discloses, "special software programs called text recognition engines are known and have been applied to tablet computers. Such engines allow pen input to be recognized as characters and then manipulated as character data (col. 26, lines 38-42)."

At the time of invention, it would have been obvious to one skilled in the art to modify a system of Montlick and Frasca Jr. to further provide text recognition as noted by Snell. The motivation for doing so would have been to provide "an improved apparatus and method for viewing, manipulating and annotating both real-time and stored medical data (Snell, col. 5, lines 50-55)." Also, even though neither Montlick, Frasca Jr., nor Snell disclose storing the coordinate data in an array, the Examiner takes Official Notice that it is a well-known practice in the art of computer science to use an array to store lists of numerical data, such as coordinate data from a touch or pen



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based input system. The motivation for doing so would be to have an organized set of coordinate data that could be easily accessed and manipulated for use in calculations and other operations of the system. Therefore, it would have been obvious at the time of invention to store coordinate data in an array to produce a tablet input system for medical records that converted handwritten notes into text information to produce a device as specified in claims 4, 5, and 11.

Regarding claim 14, the Examiner takes Official Notice that at the time of invention it was well known in the art to make data files stored on a network to be unalterable except by users with certain permissions. When a user accessed a file that has been made unalterable, a display item, icon, or message is displayed to the user that the data cannot be changed. Therefore, it would have been obvious to one skilled in the art to allow that medical records not be altered because of the need of accurate medical history for patients, and would display information so that a user would recognize when a medical record could not be altered.

5. Claims 18, 22, 23, 27, and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Montlick in view of Frasca Jr. as applied to claims 1 and 9 above, and in further view of Igarashi et al. (Applicant's Cited Prior Art: "An Architecture for Pen-based Interaction on Electronic Whiteboards"), hereinafter Igarashi.

Regarding claim 18, as discussed above the combination of Montlick and Frasca Jr. discloses all of the limitations except, "the input means moving in a horizontal direction in a sliding manner to cross an input field displayed at a position on a screen

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by the display means; and the input/display device displaying the input field, the input field being subdivided into segments."

Igarashi discloses a method of splitting segments on a pen based input system by providing a vertical line across an input field (Fig. 2; section 3.1; Inking and Segmenting).

The Examiner notes that Igarashi only shows splitting a segment using a vertical line between two elements within the segment; however, it would be obvious to one skilled in the art that splitting segments using a vertical line could be adapted to operate with a horizontal line and provide the same splitting functionality.

At the time of invention it would have been obvious to one skilled in the art to modify the pen and tablet based input system disclosed by Montlick and Frasca Jr. with the segment splitting functionality of the system described by Igarashi. The motivation for doing so would be to provide users with flexibility for organizing and working with written input placed on the input system (Igarashi, paragraph spanning the end of the first page to the beginning of the second page). Thus, it would have been obvious to modify the teachings of Montlick and Frasca Jr. with the teachings of Igarashi to produce a method as described in claim 18.

Regarding claims 22 and 23, Igarashi discloses "dragging an input field selected from a plurality of input fields displayed at positions on a screen by the display means and moving the input field in the screen; and the input/display device one of minimizing or magnifying one of the input field and other input fields on the screen according to movement of the input field dragged by the input means (Igarashi, Fig. 3; section 3.1

final paragraph). This type of moving and squashing would be used to ensure visibility and to keep segments from overlapping when being moved around the screen by the user (Igrashi; section 3.1; final paragraph). This allows hand-written notes and input to be kept visible and selectable for the user.

Regarding claim 30, the Examiner notes that like claim 9, claim 30 recites the method "further comprising one of" and then lists various actions. The seventh and eighth operations are the same as the ones defined in claim 22 and 23 and therefore the arguments can be applied to claim 30 as well.

Regarding claim 27 (which is dependent on claim 30), Montlick teaches, "wherein said input/display device is a pen-tablet device (Fig. 1, element 12)."

6. Claim 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Montlick in view of Frasca Jr. as applied to claim 1 above, and in further view of Fenster et al. (USPN: 5454371), herein after Fenster.

Regarding claim 20, as discussed above Montlick and Frasca Jr. discloses all of the limitations except, "the input means moving from a first point to a second point on an image displayed at a position on a screen by the display means; and the input/display device measuring a distance of movement between the first and the second points and displaying the distance over the image."

Fenster discloses a medical imaging system where images can be manipulated and measured using points defined by the user input device (col. 23, lines 25-39). The Examiner notes that the Fenster does not specify where the measured distance is

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displayed on the screen, but the Examiner states that it would be a design choice for one skilled in the art to display the measured value above the image or inside the image or at any desired location on the screen. Further, Fenster discloses the system using a mouse but states that the system could be realized using various input devices including digitizer and light pen (col. 23, lines 62-67).

At the time of invention it would have been obvious to one skilled in the art to modify the teachings of Montlick and Frasca Jr. with the teachings of Fenster. The motivation for doing so would have been to the user with techniques for manipulating images displayed on display screen (Fenster, col. 1, lines 47-52). Thus, it would have been obvious to provide methods of manipulating images by allowing a user to measure distances on within the image and displaying such distances as disclosed by Fenster with the medical input system disclosed by Montlick and Frasca Jr. to produce the device in claim 20.

Regarding claim 21, Fenster discloses method of drawing a trace beginning at a point displayed at a position on the screen and then rotating the image based on the length and direction of the trace (Figs. 21a -21c; col. 17, lines 10-56).

7. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Montlick in view of Frasca Jr. as applied to claim 1 above, and in further view of Tanaka (USPN: 5249296).

Regarding 25, as discussed above Montlick and Frasca Jr. discloses all of the limitations except, "the input means dragging a sheet label displayed at positions on a

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screen by the display means and moving the sheet label upward; and the input/display device reading data stored in the storage in relation to the sheet label from the storage and displaying the data below the sheet label by classifying the data."

Tanaka discloses a gesture based input system for a pen based input system. The input system allows that a new window is opened after the execution of a dragging operation of an icon on the screen (abstract; col. 3, lines 9-12; col. 5, lines 9-28). The Examiner states that the dragging operation of Tanaka involves selecting an associated icon for a record/file/program and then dragging the icon to a location on the screen, wherein the computer system then opens a window and displays the associated information to the icon. The dragging operation may be done in any direction including up; and the generic icon of Tanaka also covers a sheet label or other type of designation of a file or program operating on the computer system.

At the time of invention it would have been obvious to one skilled in the art that would be possible to modify a handwriting input system such as disclosed by Montlick and Frasca Jr. with the ability to select an icon and drag the icon in a direction to display the file information at the location specified by the drag operation as disclosed by Tanaka. The motivation for doing so would have been "to provide an information processing apparatus for controlling window positions, the apparatus allowing the user to employ any one of the two icon-selecting methods, "check" and "drag" (Tanaka, col. 2, lines 34-38)" also Tanaka finds prior art systems for displaying a window to be "complicated, constrained and confusing (col. 2, line 30)." Thus, it would have been

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obvious to one skilled in the art to combine Montlick, Frasca Jr. and Tanaka to produce a device as specified in claim 25.

8. Claims 17, 19, 26, 28, 29, 35, and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Montlick in view of Frasca Jr. and in view of the Applicant's Admitted Prior Art (disclosure page 22, line 28 – page 23, line 2), hereinafter AAPA.

Regarding claim 28, Montlick discloses a medical support system with an input/display device (Fig. 1, element 12) including input means and display means and receiving hand writing inputs (see Fig. 3), a storage (Fig. 1, elements 19 and 20) for storing substantially all medical data (col. 4, line 66- col. 5 line 2). However, Montlick does not expressly disclose, "the input means drags a particular input field selected from a plurality of input fields displayed at particular positions on a screen by said display means and drops the particular input field onto a sheet label, and said storage stores data of said particular input field with a relationship established to said sheet label." Nor does Montlick expressly disclose determining an identifier representing an intra-identifier code.

Frasca, Jr. discloses an outpatient data system for providing medical care from multiple physical locations connected to a computer system across a network. Frasca Jr. discloses storing data records based on input from a location that include storage of the person entering the data, the location the data was entered from and other timing information about the overall data file (Fig. 9, elements 208, 236, and others; col. 8, line 62 – col. 9, line 53). The data fields such as location the record was entered and the

person who created the data record are intra-identifier codes, in that these data fields provide searchable identifier codes that link different data records based on attributes of the information with the data record. Frasca Jr. states that the information in the record can be input by a user or automatically by a computer system (col. 10, lines 14-21).

Thus, it would be obvious that data could be entered through a handwritten data entry system, a keyboard entry system, or any other type of data entry system for a computer.

At the time of invention it would have been obvious to combine the teachings of Montlick with Frasca Jr. to produce a medical record storage system that provides intra-identifier codes to stored data records that provide further information about a data record. The data records could be input through the handwriting input system of Montlick rather than using the phone based or automatic entry system of Frasca Jr. The rationale for including such intra-identifier codes would be to increase the ability to search and retrieve related files from a large database of medical records and security to keep invalid or false data records from being created within the system. Thus, it would have been obvious to one skilled in the art to combine the teachings of Montlick and Frasca Jr. to produce a medical record storage device that allows for entry of intra-identifier codes along with medical records for proper storage and identification of a medical record.

The AAPA discussed on pages 22 and 23 of the specification describe the method of dragging a segment and dropping into a sheet label and storing the information. Further, this technique is described as being analogous to the "drag and drop for Windows" and "the present invention may be an another OS having a same

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function about 'drag and drop'. The drag and drop technique described as part of claim 28 is therefore a previously known technology provided by other computer operating systems.

At the time of invention it would have been obvious to one skilled in the art that the pen input system of Montlick and Frasca Jr. could be modified using the 'drag and drop' technique of prior knowledge to produce the device as specified in claim 28. This would be an obvious implementation of commonly used techniques for manipulating input fields in a computer based operating system as shown by Windows as well as other operating systems providing graphical interfaces. Thus, it would be obvious to one skilled in the art that a drag and drop technique as used in other common computer systems could be used with an input system as utilized by Montlick and Frasca Jr. and the combination would produce a device as specified in claim 28.

Regarding claims 17 and 19, the Examiner notes that these claims provide limitations of a drag and drop function similar to the limitations of claim 28. Therefore, the combination of Montlick, Frasca Jr. and the prior knowledge of one skilled in the art could also be applied to read on the limitations of the method described in claims 17 and 19.

Regarding claim 26, Montlick teaches, "wherein said input/display device is a pen-tablet device (Fig. 1, element 12)."

Regarding claim 29, Montlick teaches, "wherein in the storage the data are substantially all stored after... an operation to explicitly close a medical report (col. 8, lines 1-9)."



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Regarding claims 35, Frasca Jr. discloses providing identifier codes that identify the input operator of a data record (Fig. 9, element 236; col. 9, lines 44-53).

Regarding claims 36, Frasca Jr. discloses providing identifier codes that identify the location that data was input from (Fig. 9, element 208; col. 9, lines 9-22). The Examiner notes that the Site could be modified to include the device the actual physical device used to enter the data element rather than a physical outpatient location used to enter the data from.

### ***Conclusion***

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Henderson et al. (USPN: 5737740) discloses a pen and page identifier code placed on a printed sheet for identification and storage of a digital handwritten file. Silverbrook et al. (USPN: 6457883) discloses a digital input pen for handwriting input that includes unique identifiers for each pen assigned to individual users for identification of handwritten information input by different individuals.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven E. Holton whose telephone number is (571) 272-7903. The examiner can normally be reached on M-F 8:30-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amr Awad can be reached on (571) 272-7764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Steven E. Holton  
Division 2629  
September 28, 2007

AMR A. AWAD  
SUPERVISORY PATENT EXAMINER

